

Our approach to noise and vibration

The construction and operation of a railway can generate noise and vibration from things like machinery, earthworks and train movements. We are assessing these potential impacts in detail and developing measures to minimise impacts wherever possible. This document explains our current approach to noise and vibration.

One of our Environmental Sustainability Strategy pillars is to build a railway that:

“Protects the health and wellbeing of our communities, customers and colleagues.”

Our approach supports the aims of the Noise Policy Statement for England and aims to:

- Avoid significant adverse impacts on health and quality of life
- Mitigate and minimise adverse impacts on health and quality of life
- Where possible, contribute to the improvement of health and quality of life

We are in the process of undertaking a detailed assessment of the potential noise and vibration impacts that may arise due to construction activities and later, from the operation of trains on East West Rail (EWR) services. This assessment is helping to shape the design and inform how potential noise and vibration impacts, at all stages, can best be controlled and, where possible, mitigated.

An assessment of the potential noise and vibration impacts of EWR will be set out in the Environmental Statement that will be submitted as part of the Development Consent Order (DCO) application.

What is noise and vibration?

Noise is generally described as unwanted sound. Noise is typically generated by construction activities such as demolition, roadworks or earthworks, where machinery and breaking of hard surfaces is involved. When the project is operational, noise can be generated though train movements, the operation of maintenance facilities and changes in road traffic.

Vibration is generally described as the movement or shaking of the ground or structures. Vibration is generated by construction activity such as piling and tunnelling and, during operation, by train movements.

Understanding noise and vibration impacts

The assessment methodology and criteria for noise and vibration arising from our proposals will be based on accepted standards and guidelines to identify any potential significant effects. The potential for significant effects will be considered in terms of disturbance to building occupants, disruption of activities within receptors (such as laboratories) and the onset of cosmetic or structural damage to buildings or sensitive structures.

To assess impacts, we must understand the existing noise and vibration levels so that we can describe the changes in noise and vibration caused by the project.

Baseline surveys have been undertaken at locations to represent typical noise and vibration characteristics, as well as at locations where there is potential for a significant change in noise or vibration due to our proposals.

To understand and predict potential impacts, we are using industry-leading noise modelling software to simulate potential noise and vibration levels along the route, considering both construction and operational activities.

These predictions are being undertaken throughout the design process so that appropriate mitigation measures can be developed to protect noise and vibration sensitive receptors, and will be included in the proposals for the project as part of the DCO submission. Examples of mitigation measures may include selection of quieter rolling stock, design features that shape how the railway sits within the landscape, and, where necessary, noise bunds or barriers.



Noise barrier

Get in touch

If you have any questions, please get in touch using the details below:



eastwestrail.co.uk



contact@eastwestrail.co.uk



0330 134 0067



FREEPOST EAST WEST RAIL